

Christmas Bird Counts: Science or Seance?

by William Moskoff

Few who have braved a brutally cold December day on a Christmas Bird Count in Illinois would consider it a bad experience. On the contrary, it is one that bonds the many birders who annually give their time and energy to counting birds. And there is always the chance that one might hear the mellifluous call of a winter rarity such as a Carolina Wren or catch a Bald Eagle soaring along the shoreline of Lake Michigan. It is, in short, a terrific birding event. But is it science? Are Christmas Bird Counts (CBCs) merely interesting outings or do they actually make a significant contribution to our understanding of how many birds there are in early winter in North America and where they are located?

CBCs as science are clearly flawed, partly because of defects inherent in the system, and partly because of the limitations of those who participate in the program. As John Terborgh said, the count is "basically an organized competition and social event for birders." Yet, for all of its problems, the CBC continues to be used by ornithologists, environmentalists, and government policy makers. Terborgh himself concedes that the CBC has served well because it "constitutes the longest continuous record of bird populations available in North America" (Terborgh 1989). So the fact is that the CBC's extensive data, both long-term and

large-scale, and its broad coverage on the continent, provide a rich resource of information despite the inherent multitude of methodological sins.

The CBC began quite modestly in 1900 when a mere 27 people, sponsored by the forerunner of the National Audubon Society, undertook a count in several selected spots around the country. Since then, the CBC, held within two weeks of Christmas, has grown at an enormous rate, to the point where in 1992 more than 40,000 people participated. Each group covers a 15-mile diameter circle on foot, bicycles,

and snowshoes, and in cars, boats, and even planes.

The CBC is not the only effort to count birds. There are many surveys covering local areas, whether of rookeries or aerial surveys of wading birds. The U.S. Fish and Wildlife Service and the Canadian Wildlife Service conduct the Breeding Bird Survey (BBS) to count breeding pairs of every species within a narrowly defined area of a particular kind of habitat. The BBS is a demanding exercise, requiring more skill and patience than the CBC. Those who do the breeding sur-

Christmas Bird Count: A Historical Perspective

Prior to 1900, Christmas Day in America was not for counting birds, but for hunting them. Ornithologist Frank Chapman decided in 1900 to change that tradition by organizing bird counts in the northeast on Christmas Day.

Chapman established 25 counts with 27 observers. Today, the annual birding event encompasses more than 1,600 counts nationwide as well as in Canada, Mexico, Central America, and even Brazil. In addition, at least 10 counts are held in the Pacific Islands.

In North America, more than 600 species are recorded annually by some 40,000 observers. The count has become a social, scientific, and recreational event. Often the bird data round-up is done at traditional countdown parties where birders keep their rarities a secret until the end, like seasoned poker players.

Frank Chapman's substitute for the Christmas slaughter has now become a competitive sport and a nearly 100-year-old tradition. The Christmas count is today and perhaps always will be the largest avian data collection effort by birders.